

## Product datasheet for MR225744

### Per1 (NM\_001159367) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Per1 (NM_001159367) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Per1
Synonyms:	Hftm; m-rigui; mPer1; Per
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR225744 representing NM_001159367 Red=Cloning site Blue=ORF Green=Tags(s)

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CTCTGATGTCCCCTGGTCTCTACACAGCCCTGGCTCCTCCAGTGATAGCAATGGGGGGACGCTGAGGG  
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Protein Sequence: >MR225744 representing NM\_001159367  
 Red=Cloning site Green=Tags(s)

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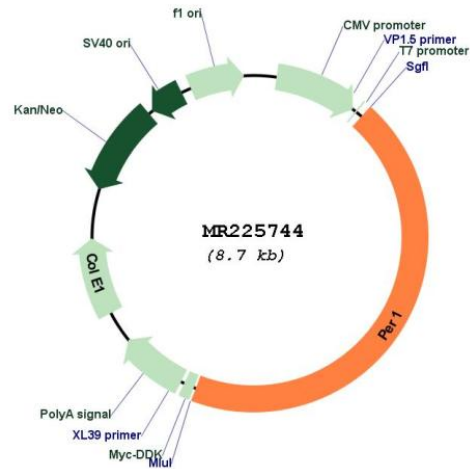
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



## Plasmid Map:



ACCN: NM\_001159367

ORF Size: 3873 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM\\_001159367.2](#)

RefSeq Size: 4648 bp

RefSeq ORF: 3876 bp

Locus ID: 18626

UniProt ID: [O35973](#)

Cytogenetics: 11 B3

**MW:** 136.8 kDa

**Gene Summary:** This gene is a member of the Period family of genes and is expressed in a circadian pattern in the suprachiasmatic nucleus, the primary circadian pacemaker in the mammalian brain. Genes in this family encode components of the circadian rhythms of locomotor activity, metabolism, and behavior. This gene is upregulated by Clock/Arntl heterodimers but then represses this upregulation in a feedback loop using Per/Cry heterodimers to interact with Clock/Arntl. Polymorphisms in this gene may increase the risk of getting certain cancers. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jan 2014]